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Final Regulation Agency Background Document

Agency name	State Air Pollution Control Board
Virginia Administrative Code (VAC) citation(s)	Primary: Article 59 of 9VAC5-40 (Existing Stationary Sources) Secondary: 9VAC5-20-21; Article 34 of 9VAC5-40 (Existing Stationary Sources)
Regulation title(s)	Regulations for the Control and Abatement of Air Pollution
Action title	New Regulation: VOC Emission Standards for Miscellaneous Metal and Plastic Parts Coating Operations (Rev. E09)
Date this document prepared	May 29, 2015

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 17 (2014) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief summary

Please provide a brief summary of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

The regulation requires owners to limit emissions of air pollution from miscellaneous metal and plastic parts coating operations to the level necessary for the protection of public health and welfare, and the attainment and maintenance of the air quality standards. The regulation applies to sources within the Northern Virginia volatile organic compound (VOC) emissions control area, and establishes standards, control techniques, and provisions for determining compliance. The regulation also includes provisions for visible emissions, fugitive dust, odor, toxic pollutants, compliance, test methods and procedures, monitoring, notification, registration, malfunctions, and permits.

Based on comments received during the public comment period, a number of amendments, primarily exemptions, were made to the proposal in order to make the regulations operate more efficiently.

Acronyms and definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

ACA - American Coatings Association
CFR - Code of Federal Regulations
CTG - control techniques guideline
EMF - electromagnetic interference
EPA - U.S. Environmental Protection Agency
Gal - gallons
kg – kilogram
lb - pound
NAAQS - National Ambient Air Quality Standard
NAICS - National American Industry Classification System
NO_x - nitrogen oxides
RACM - reasonably available control measure
RACT - reasonably available control technique
RFI - radio frequency interference
ppm - parts per million
SIC – Standard Industrial Classification
SIP - state implementation plan
VOC - volatile organic compound

Statement of final agency action

Please provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

On June 19, 2015, the State Air Pollution Control Board took final action to adopt amendments to regulations entitled "Regulations for the Control and Abatement of Air Pollution," specifically VOC Emission Standards, Miscellaneous Metal and Plastic Parts Coating Operations (9VAC5 Chapter 40, Article 59). The regulatory action is to be effective as provided in the Administrative Process Act.

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including: 1) the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable; and 2) promulgating entity, i.e., agency, board, or person. Your citation should include a specific provision authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency/board/person's overall regulatory authority.

Section 10.1-1308 of the Virginia Air Pollution Control Law (Title 10.1, Chapter 13 of the Code of Virginia) authorizes the State Air Pollution Control Board to promulgate regulations abating, controlling and prohibiting air pollution in order to protect public health and welfare. Written assurance from the Office of the Attorney General that the State Air Pollution Control Board possesses the statutory authority to promulgate the proposed regulation amendments is available upon request.

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Describe the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

The purpose of the proposed action is to adopt new standards for the control of volatile organic compound (VOC) emissions from miscellaneous metal and plastic parts coating operations within the Northern Virginia VOC Emissions Control Area. This action is being taken to allow Virginia to meet its obligation to implement control measures in areas designated as nonattainment under the 0.08 parts per million (ppm) 8-hour ozone standard. It will contribute to the reduction of ozone air pollution, and thereby improve public health and welfare.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both.

For the new Article 59:

1. An applicability section is established which specifies the affected source population.
2. Definitions of terms used in the rule are provided.
3. A standard for VOC emissions is established, along with provisions for achieving the standard.
4. Standard provisions are provided for visible emissions; fugitive dust/emissions; odor; toxic pollutants; compliance; a compliance schedule; test methods and procedures; monitoring; notification, records and reporting; registration; facility and control equipment maintenance or malfunction; and permits

Issues

Please identify the issues associated with the proposed regulatory action, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.

1. Public: The primary advantage to the general public is the reduction of VOC air pollution, which has a negative effect on public health and welfare. Regulated sources may realize cost savings through more effective application procedures and practices. There are no disadvantages to the public.
2. Department: The primary advantages to the department are that the adoption of these regulations will allow Virginia to attain and maintain air quality standards and improve public health of Virginians. The primary disadvantage to the department is the potential for an increased compliance cost to administer the new regulations.

Requirements more restrictive than federal

Please identify and describe any requirement of the proposal which is more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

The proposed regulation amendments are not more restrictive than the applicable legal requirements.

Localities particularly affected

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

The localities particularly affected by this action are located in the Northern Virginia volatile organic compound (VOC) emissions control area: counties of Arlington, Fairfax, Loudoun, Prince William, Stafford; cities of Alexandria, Fairfax, Falls Church, Manassas, Manassas Park.

Changes made since the proposed stage

*Please list all changes that made to the text of the proposed regulation and the rationale for the changes; explain the new requirements and what they mean rather than merely quoting the proposed text of the regulation. *Please put an asterisk next to any substantive changes.*

Section number	Requirement at proposed stage	What has changed	Rationale for change
*9VAC5-40-8810	Exemptions only included those listed in subsections C and D	Additional exemptions have been added including aerosol products and powder coatings (exemption D 5), specific metal coatings (exemption E), specific plastic coatings (exemption F), automotive/transportation and business machine plastic part coatings (exemption G), and recommended application methods for pleasure craft surface coatings (exemption H).	Exemptions were recommended in the Control Technology Guideline (CTG) published by EPA and requested by the American Coatings Association (ACA).
9VAC5-40-8820		Added definition of "Antifouling Sealer/Tie Coat"	Definition is necessary as it is a new category of coatings requested by the American Coatings Association
		Added definition of "Biocide"	Definition necessary as it is referenced in the new category of coatings requested by the

			American Coatings Association
		Added definition for EMF/RFI shielding	Definition necessary as it is included in the exemption provisions
	Definition for "Business machines" is the definition used in SIC codes	Definition for "Business machines" is the definition used in NAICS codes	EPA recommended the changes to conform to federal regulations
9VAC5-40-8830	VOC content limit for high performance architectural coating	Limit for air-dried and baked coatings was 0.42 kg VOC/liter; changed to 0.74 kg VOC/liter. Values for pounds per gallon were changed from 3.5 lb to 6.2lb	The corrected values were recommended in the CTG
	VOC content limit for Extreme high gloss topcoat for pleasure craft surface coating	Limit for coating was 0.49 kg VOC/liter; changed to 0.60 kg VOC/liter. Values for pounds per gallon were changed from 4.1 lb to 5.0 lb	ACA recommended the limit change to due to the fact that for this particular industry, the lower VOC technologies are not functional for the pleasure craft industry.
		Added a new coating category for pleasure craft industry: Antifouling Sealer/Tie Coat. VOC content limits are: 0.42 kg VOC/liter solids and 3.5lb VOC/gal solids.	New category requested by the ACA to comply with the International Maritime Organization Antifouling System convention which was ratified and is international law.
	VOC content limit for high performance architectural coating VOC per volume solid	Limit for air-dried and baked coatings was 0.80 kg VOC/liter; changed to 0.4.56 kg VOC/liter. Values for pounds per gallon were changed from 6.67 lb to 38.0 lb	The corrected values were recommended in the CTG
	VOC content limit for Extreme high gloss topcoat for pleasure craft surface coating VOC per volume solid	Limit for coating was 0.49 kg VOC/liter; changed to 0.60 kg VOC/liter. Values for pounds per gallon were changed from 4.1 lb to 5.0 lb	ACA recommended the limit change to due to the fact that for this particular industry, the lower VOC technologies are not functional for the pleasure craft industry.
		Added a new coating category for pleasure craft industry: Antifouling Sealer/Tie Coat. VOC per volume of solid values are: 0.8 kg VOC/liter solids and 6.7 lb per VOC/gal solids.	New category requested by the ACA to comply with the International Maritime Organization Antifouling System convention which was ratified and is international law.

Public comment

Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.

Commenter	Comment	Agency response
EPA	<p>These regulations contain the provision "Facility and control equipment maintenance or malfunction," which incorporates by reference the provisions of 9VAC5-20-180. This regulation contains Virginia's affirmative defense for malfunction (subsection G). EPA cannot approve any State Implementation Plan (SIP) revisions containing 9VAC5-20-180 G as presently written.</p>	<p>Because the final SIP call malfunction rule was signed on May 22, 2015, the department will not have time to modify the malfunction rules in time such that reference to them in the CTG rules is not an issue. Therefore, the affected malfunction provisions of the CTG rules will simply not be submitted as part of the initial SIP revision for those rules. This will enable EPA to approve the remainder of the CTG rules into the SIP in a timely and administratively rational manner. When the final malfunction rule is published and the department is able to amend the malfunction regulations accordingly, the outstanding CTG provisions will be submitted as part of the SIP at the same time. No change has been made to the proposal as a result of this comment.</p>
EPA	<p>These regulations contain the provisions "Standard for odor" and "Standard for toxic pollutants," which incorporate by reference the provisions in 9VAC5-40-130 and 9VAC5-60-200. § 107(a) of the Clean Air Act provides that SIPs are for the attainment and maintenance of national ambient air quality standards (NAAQS). The provisions in 9VAC5-40-130 and 9VAC5-60-200 are not applicable to the NAAQS. Therefore, EPA is concerned with SIP-approving provisions not in accordance with § 107(a), unless Virginia can explain how these are related to attainment and maintenance of the NAAQS.</p>	<p>As has been done in the past with other stationary source regulations for the control of VOC, the state-only odor and toxics provisions will not be submitted as part of the final SIP submittal. The public notice states, "It is planned to submit all provisions of the proposals as revisions to the Commonwealth of Virginia SIP with the exception of provisions related to state programs for odor and toxics." No change has been made to the proposal as a result of this comment.</p>
EPA	<p>Current proposal uses the definition listed in the Standard Industrial Classification (SIC) codes which was recommended in the 2008 Control Technology Guidelines, upon which the regulation is based. EPA believes this was an error in the CTG and the definition should now be based on the more relevant National American Industry Classification System (NAICS) codes which are currently used in EPA regulations.</p>	<p>This comment is acceptable and the proposal has been modified accordingly.</p>

<p>David Darling, Senior Director, Environmental Affairs, American Coatings Association (ACA)</p>	<p>The proposal includes a limit of 3.5 lb VOC/gal coating for baked and air dried “High Performance Architectural” coatings, whereas the Environmental Protection Agency (EPA) Miscellaneous Metal Control Techniques Guideline (CTG) recommends a limit of 6.2 lb VOC/gal coating for baked and air dried “High Performance Architectural” coatings. ACA recommends that Virginia Department of Environmental Quality (DEQ) adopt the 6.2 lb VOC/gal limit; since these coatings are used on exterior metal panels that are under constant exposure to harsh weather conditions, a higher VOC content limit will help assure more durable coatings.</p>	<p>This comment is acceptable and the proposal has been modified accordingly.</p>
<p>David Darling, Senior Director, Environmental Affairs, ACA</p>	<p>ACA recommends that Virginia DEQ exempt powder coatings and UV coatings since these are inherently low VOC alternatives to many liquid coatings (see page 30 of the CTG).</p>	<p>This comment is acceptable and the proposal has been modified accordingly.</p>
<p>David Darling, Senior Director, Environmental Affairs, ACA</p>	<p>ACA recommends that Virginia DEQ include the EPA-recommended exemptions found on pages 30, 31 and 32 of the CTG document, including exemptions from the metal part, plastic part, and automotive/transportation VOC limits and application methods.</p>	<p>This comment is acceptable and the proposal has been modified accordingly.</p>
<p>John Hopewell, Director, International Affairs, American Coatings Association</p>	<p>ACA recommends that Virginia DEQ modify the VOC limit for Extreme high gloss coatings as the low VOC coatings are inferior to traditional, higher VOC containing products. Although high solids and water-based technologies are available and in use in other industries (e.g. car refinishing and aviation) the controlled application conditions which make the use of these coatings possible in those industries are neither available nor possible for the pleasure craft coating industry.</p> <p>These coatings have a reduced lifetime and their use will necessitate a more frequent recoating schedule which means in relative terms, more VOC is emitted.</p>	<p>This comment is acceptable and the proposal has been modified accordingly.</p>
<p>John Hopewell, Director, International Affairs, American Coatings Association</p>	<p>ACA recommends that Virginia DEQ include a new category, "Antifouling Sealer/Tie Coat" as it is required as a result of the International Maritime Organization Antifouling Systems convention (IMO AFS).</p>	<p>This comment is acceptable and the proposal has been modified accordingly.</p>
<p>John Hopewell, Director, International Affairs, American Coatings</p>	<p>ACA recommends that Virginia DEQ add a definition for “Antifouling Sealer/Tie Coat” which means a coating applied over biocidal antifouling coating for the purpose of preventing release of biocides into the environment and/or to promote</p>	<p>This comment is acceptable and the proposal has been modified accordingly.</p>

Association	adhesion between an antifouling and a primer or other antifouling.	
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All changes made in this regulatory action

Please list all changes that are being proposed and the consequences of the proposed changes. Describe new provisions and/or all changes to existing sections. Explain the new requirements and what they mean rather than merely quoting the proposed text of the regulation

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
Chapter 20 Existing Provision			
9VAC5-20-21	N/A	Documents incorporated by reference.	Two documents referenced in the new Article 59 must be added to the list of technical documents incorporated by reference. Will enable implementation the regulation according to the standards established by the named documents.
Article 34 Existing Provision			
9VAC5-40-4760	N/A	Applicability and designation of affected facility established.	Applicability of Article 34 must be limited only to VOC control areas that are not located in the Northern Virginia VOC Control Area, as this area will now be covered instead by the new Article 59. Will properly limit the requirements of the particular CTG to the appropriate area.
Article 59 New Requirements			
	9VAC5-40-8810		Applicability and designation of affected facility established. Will enable potentially affected sources to determine if the regulation applies to a particular source.
	9VAC5-40-8820		Definitions added. Will enable the provisions of the rule to be clearly understood, and to ensure proper implementation.
	9VAC5-40-8830		Standard for VOCs added. Will enable affected sources to know what VOC emission limits they must meet, and how those emissions will be controlled.
	9VAC5-40-8840		Standard for visible emissions added. Will enable affected sources to know what visible emission limits they must meet.
	9VAC5-40-8850		Standard for fugitive dust/emissions added. Will enable affected sources to know what fugitive dust/emissions limits they must meet.
	9VAC5-40-8860		Standard for odor added. Will enable affected sources to know what odor limits they must meet.
	9VAC5-40-8870		Standard for toxic pollutants added. Will enable affected sources to know what toxic

			pollutant limits they must meet.
	9VAC5-40-8880		Compliance provisions added. Will enable affected sources to know what compliance requirements they must meet.
	9VAC5-40-8890		Compliance schedule added. Will enable affected sources to know when the requirements of the rule must be met.
	9VAC5-40-8900		Test methods and procedures added. Will enable affected sources to know what test methods and procedures must be followed.
	9VAC5-40-8910		Monitoring provisions added. Will enable affected sources to know what monitoring requirements must be met.
	9VAC5-40-8920		Notification, records and reporting provisions added. Will enable affected sources to know what notification, records and reporting requirements must be met.
	9VAC5-40-8930		Registration provisions added. Will enable affected sources to know what registration requirements must be met.
	9VAC5-40-8940		Facility and control equipment maintenance or malfunction provisions added. Will enable affected sources to know what facility and control equipment maintenance or malfunction requirements must be met.
	9VAC5-40-8950		Requirements for permits added. Alerts sources that additional permitting requirements located in other parts of the regulations must be met.

Family impact

Please assess the impact of this regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

It is not anticipated that the proposal will have a direct impact on families.

Regulatory flexibility analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

The regulations apply to all facilities, including small businesses. Any (1) establishment of less stringent compliance or reporting standards; (2) establishment of less stringent schedules or deadlines for compliance or reporting requirements; (3) consolidation or simplification of compliance or reporting requirements; (4) establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; or (5) exemption of small businesses from all or any part of the requirements contained in the proposed regulation for all small businesses would directly, significantly and adversely affect the benefits that would be achieved through the implementation of the regulations.

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